

OIPE

DATE: 05/07/2002 RAW SEQUENCE LISTING PATENT APPLICATION: US/09/778,187B

TIME: 13:59:49

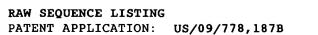
Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\05072002\I778187B.raw

		<110>																IERE
	4					II, V												
		<120>								ULES	DES:	IGNA:	red 1	LDCAI	M			
	_	<130>											105	_				
		<140>									-	/778	, 1871	В				
		<141>										·	205					
		<150>								-	/US9	9/I/S	905					
		<151>									co /0/) F (*)	7 7					
		<150>									00/0	90,0	1 2					
			<151> PRIOR FILING DATE: 1998-08-07 <160> NUMBER OF SEQ ID NOS: 10															
		<170> NUMBER OF SEQ ID NOS: 10 <170> SOFTWARE: PatentIn version 3.1																
		<210> SEQ ID NO: 1 <211> LENGTH: 1598																
		<211> LENGTH: 1598 <212> TYPE: DNA																
		<212> TYPE: DNA <213> ORGANISM: homo sapiens																
		<213> ORGANISM: homo sapiens <220> FEATURE:																
		<221> NAME/KEY: CDS																
		<221> NAME/RET: CDS <222> LOCATION: (16)(1341)																
		<223> OTHER INFORMATION:															•	
	33	<400>	SE	QUEN	ICE:	1												
	34	gcggc	cgc	gc c	ccgac													51
	35					Met	t Ala	se Se	r Vai	l Val	l Lei	ı Pro	Sei	r Gly		r Glı	n Cys	
	36					1				5					10			
		gcg g	_	-		_												99
		Ala A	la		Ala	Ala	Ala	Ala		Pro	Pro	Gly	Leu	-	Leu	Arg	Leu	
	40			15					20					25				1.47
		ctg c																147
		Leu I		Leu	Leu	Phe	Ser		Ala	Ala	Leu	Пe		Thr	GLY	Asp	GTÀ	
	44	_	0	at~	+++	3.00	222	35	a+~	262	a+ ~	a+~	40	~~~	<i>~~~</i>	~++	aca	195
		cag a																133
,	4 7		1211	neu	FIIE	1111	ьуs 50	изр	val	TIII	val	55	GIU	ату	GLU	val	60	
		acc a	tc	aut	tac	caa		aat	aan	agt	nac		tet	ata	att	Cau.		243
		Thr I																233
	52	1111 1	16	Jer	Cys	65	4 U I	HOII	פעם	JCI	70	пэр	DCI	4 U.L	110	75	Lu	
		ctg a	at.	ccc	aac		саσ	acc	att	tat		ασσ	gac	t.t.c	аσσ	. –	tta	291
		Leu A					_						_				_	= # =
	56				80	5				85		5			90			
		aag g	ac	agc		ttt	caq	tta	ctq		ttt	tct	aqc	agt		ctc	aaa	339
		Lys A																
	60	-	-	95					100					105			_	

62 gta tca ttg aca aac gtc tca att tct gat gaa gga aga tac ttt tgc

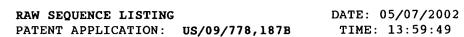
387



DATE: 05/07/2002 TIME: 13:59:49

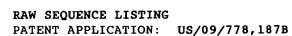
62 1121																
64	Ser 110	Leu	Thr	Asn	Val	Ser 115	Ile	Ser	Asp	Glu	Gly 120	Arg	Tyr	Phe	Cys	
66 cag	ctc	tat	acc	gat	ccc	cca	caq	qaa	agt	tac	acc	acc	atc	aca	qtc	435
67 Gln				_			_	-	-						-	
68 125		-1-			130		U	0_0		135					140	
	~+~				-	-+-	-+-	a t- a					~~~			402
70 ctg	-			_		_	-		-		_		-			483
71 Leu	vaı	Pro	Pro	-	Asn	Leu	Met		_	тте	GIn	rys	Asp		Ala	
72				145					150					155		
74 gtg																531
75 Val	Glu	Gly	Glu	Glu ·	Ile	Glu	Val	Asn	Cys	Thr	Ala	Met	Ala	Ser	Lys	
76			160					165					170			
78 cca	qcc	acq	act	atc	agg	taa	ttc	aaa	aaa	aac	aca	gag	cta	aaa	ggc	579
79 Pro	-	_														
80		175			5		180	_10	1			185		_10	U -1	
	+ 00		ata	722	222	+ ~ ~		a 20	a+a	+ > 0	20+		300	201	a=a	627
82 aaa	_			_				-	_					-	_	027
83 Lys		GIU	Val	GIU	GIU	_	ser	ASP	мес	TAL		Val	THE	ser	GIII	
84	190					195					200					
86 ctg																675
87 Leu	Met	Leu	Lys	Val	His	Lys	Glu	Asp	Asp	Gly	Val	Pro	Val	Ile	Cys	
88 205				•	210					215					220	
90 cag	gtg	qaq	cac	cct	qcq	qtc	act	qqa	aac	ctq	caq	acc	caq	cqq	tat	723
91 Gln																
92				225				_	230					235	-1-	
94 cta	паа	αta	cad		aan	cct	caa			att	car	ata	act		cct	771
95 Leu																,,_
95 Lea	GIU	Val	240	TAT	шyэ	PIO	GIII	245	птэ	TTE	GIII	Mec	250	TAT	FIO	
90								241					2.3U			
00 -+-																010
98 cta			tta					gac					aca			819
99 Leu		Gly	tta Leu				Gly	gac Asp				Leu	aca Thr			819
99 Leu 100	Gln	Gly 255	tta Leu	Thr	Arg	Glu	Gly 260	gac Asp	Ala	Leu	Glu	Leu 265	aca Thr	Cys	Glu	819
99 Leu	Gln	Gly 255	tta Leu	Thr	Arg	Glu	Gly 260	gac Asp	Ala	Leu	Glu	Leu 265	aca Thr	Cys	Glu	819 867
99 Leu 100	Gln c ato	Gly 255 ggg	tta Leu ; , aag	Thr ccc	Arg cag	Glu cct	Gly 260 gtg	gac Asp atg	Ala gta	Leu act	Glu . tgg	Leu 265 gtg	aca Thr aga	Cys gto	Glu gat	
99 Leu 100 102 gc	Gln c ato	Gly 255 ggg Gly	tta Leu ; , aag	Thr ccc	Arg cag	Glu cct	Gly 260 gtg Val	gac Asp atg	Ala gta	Leu act	Glu . tgg	Leu 265 ggtg Val	aca Thr aga	Cys gto	Glu gat	
99 Leu 100 102 gc 103 Al 104	Gln c ato a Ile 270	Gly 255 ggg Gly	tta Leu j aag Lys	Thr ccc Pro	Arg cag Gln	Glu cct Pro 275	Gly 260 gtg Val	gac Asp atg Met	Ala gta Val	Leu act Thr	Glu tgg Trp 280	Leu 265 ggtg Val	aca Thr aga Arg	Cys gto Val	Glu gat Asp	
99 Leu 100 102 gc 103 Al 104 106 ga	Gln c ato a Ile 270 t gaa	Gly 255 ggg Gly atg	tta Leu ; , aag , Lys	Thr ccc Pro caa	Arg cag Gln	Glu cct Pro 275	Gly 260 gtg Val	gac Asp atg Met	Ala gta Val tct	Leu act Thr	Glu tgg Trp 280	Leu 265 gtg Val	aca Thr aga Arg	Cys gtc Val	Glu gat Asp	867
99 Leu 100 102 gc 103 Al 104 106 ga 107 As	Gln c ato a Ile 270 t gaa p Glu	Gly 255 ggg Gly atg	tta Leu ; , aag , Lys	Thr ccc Pro caa	Arg cag Gln cac	Glu cct Pro 275 gcc Ala	Gly 260 gtg Val	gac Asp atg Met	Ala gta Val tct	act Thr ggg Gly	Glu tgg Trp 280	Leu 265 gtg Val	aca Thr aga Arg	Cys gtc Val	Glu gat Asp atc	867
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28	Gln c ato a Ile 270 t gaa p Glu 5	Gly 255 ggg Gly atg	tta Leu j aag Lys cct Pro	Thr ccc Pro caa Gln	cag Gln cac His	Glu cct Pro 275 gcc Ala	Gly 260 gtg Val gta Val	gac Asp atg Met ctg	gta Val tct Ser	act Thr ggg Gly 295	Glu tgg Trp 280	Leu 265 gtg Val aac Asn	aca Thr aga Arg	gto Val tto Phe	Glu gat Asp atc Ile 300	867 915
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa	Gln c ato a Ile 270 t gaa p Glu 5	Gly 255 c ggg Gly atg	tta Leu j j aag j Lys j cct Pro	Thr ccc Pro caa Gln aaa	cag Gln cac His 290	Glu cct Pro 275 gcc Ala	Gly 260 260 Val 3 3 4 4 5 7 8 7 8 8 8 8 9 8 8 8 8 8 8 8 8 8 8 8 8	gac Asp atg Met ctg Leu	Ala gta Val tct Ser	act Thr ggg Gly 295 tac	Glu tgg Trp 280 ccc Pro	Leu 265 g gtg Val aac Asn	aca Thr aga Arg	Cys gtc Val ttc Phe	Glu gat Asp atc Ile 300 tca	867
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As	Gln c ato a Ile 270 t gaa p Glu 5	Gly 255 c ggg Gly atg	tta Leu j j aag j Lys j cct Pro	Thr ccc Pro caa Gln aaa Lys	cag Gln cac His 290 aca	Glu cct Pro 275 gcc Ala	Gly 260 260 Val 3 3 4 4 5 7 8 7 8 8 8 8 9 8 8 8 8 8 8 8 8 8 8 8 8	gac Asp atg Met ctg Leu	Ala gta Val tct Ser aca Thr	Leu act Thr ggg Gly 295 tac	Glu tgg Trp 280 ccc Pro	Leu 265 g gtg Val aac Asn	aca Thr aga Arg	gtc Val ttc Phe gct	gat gat Asp atc Ile 300 tca Ser	867 915
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As	Gln c atc a Ile 270 t gaa p Glu 5 t aac n Asn	Gly 255 ggg Gly atg	tta Leu j j aag v Lys v Cct v Pro	Thr ccc Pro caa Gln aaa Lys 305	cag Gln cac His 290 aca	Glu cct Pro 275 gcc Ala gat Asp	Gly 260 260 Val Gly Val Gly Asn	gac Asp atg Met ctg Leu ggt	gta Val tct Ser aca Thr	Leu act Thr ggg Gly 295 tac	Glu tgg Trp 280 ccc Pro	Leu 265 g gtg Val aac Asn tgt	aca Thr aga Arg ctg Leu gaa	Cys gtc Val ttc Phe gct Ala 315	gat gat Asp atc Ile 300 tca Ser	915 963
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As 112	Gln c atc a Ile 270 t gaa p Glu 5 t aac n Asn	Gly 255 c ggg c Gly n atg n Met	tta Leu Jaag Lys Cct Pro Aac	Thr ccc Pro caa Gln aaa Lys 305 aaa	cag Gln cac His 290 aca Thr	cct Pro 275 gcc Ala gat Asp	Gly 260 260 Gly Val Gly Val Gly Asn Cly	gac Asp atg Met ctg Leu ggt Gly	gta yal tct Ser aca Thr 310	act Thr 999 Gly 295 tac Tyr	Glu tgg Trp 280 ccc Pro cg Arg	Leu 265 g gtg val aac Asn tgt Cys	aca Thr aga Arg ctg Leu gaa Glu	gto Val tto Phe gct Ala 315	gat gat Asp atc Ile 300 tca Ser	867 915
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As 112 114 aaa 115 As	Gln c atc a Ile 270 t gaa p Glu 5 t aac n Asn	Gly 255 c ggg c Gly n atg n Met	tta Leu Jaag Lys Cct Pro Aac Asn Ggg	Thr ccc Pro caa Gln aaa Lys 305 aaa	cag Gln cac His 290 aca Thr	cct Pro 275 gcc Ala gat Asp	Gly 260 260 Gly Val Gly Val Gly Asn Cly	gac Asp atg Met ctg Leu ggt Gly gat Asp	gta yal tct Ser aca Thr 310	act Thr 999 Gly 295 tac Tyr	Glu tgg Trp 280 ccc Pro cg Arg	Leu 265 g gtg val aac Asn tgt Cys	aca Thr aga Arg Ctg Leu Glu gaa Glu	gto Val tto Phe gct Ala 315 tao	gat gat Asp atc Ile 300 tca Ser	915 963
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As 112 114 aa 115 As 116	Gln c atc a Ile 270 t gaa p Glu 5 t aac n Asn c ata n Ile	Gly 255 ggg Gly atg Met cta Leu gtg	tta Leu Jaag Lys Cct Pro Aac Asn Ggg Gly 320	Thr ccc pro caa Gln aaa Lys 305 aaa Lys	cag Gln cac His 290 aca Thr	Glu cct Pro 275 gcc Ala gat Asp	Gly 260 260 2 gtg Val 3 Val 4 Asn 4 tcg 5 Ser	gac Asp atg Met ctg Leu ggt Gly gat Asp 325	gta yal tct Ser aca Thr 310 tat	act Thr 999 Gly 295 tac Tyr atg	tgg Trp 280 ccc Pro cgc Arg	Leu 265 g gtg val aac Asn tgt Cys	aca Thr aga Arg Ctg Leu Glu gta Val 330	gto Val tto Phe gct Ala 315 tao	gat gat Asp atc Ile 300 tca Ser	915 963
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As 112 114 aaa 115 As	Gln c atc a Ile 270 t gaa p Glu 5 t aac n Asn c ata n Ile	Gly 255 ggg Gly atg Met cta Leu gtg	tta Leu Jaag Lys Cct Pro Aac Asn Ggg Gly 320	Thr ccc pro caa Gln aaa Lys 305 aaa Lys	cag Gln cac His 290 aca Thr	cct Pro 275 gcc Ala gat Asp	Gly 260 260 2 gtg Val 3 Val 4 Asn 4 tcg 5 Ser	gac Asp atg Met ctg Leu ggt Gly gat Asp 325	gta yal tct Ser aca Thr 310 tat	act Thr 999 Gly 295 tac Tyr atg	tgg Trp 280 CCC Pro CCC Arg	Leu 265 g gtg val aac Asn tgt Cys	aca Thr aga Arg Ctg Leu Glu gta Val 330	gto Val tto Phe gct Ala 315 tao	gat gat Asp atc Ile 300 tca Ser	915 963
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As 112 114 aa 115 As 116	Gln c atc a Ile 270 t gaa p Glu 5 t aac n Asn c ata n Ile	Gly 255 255 256 257 258 258 258 258 258 258 258 258 258 258	tta Leu Jaag Lys Cct Pro Aac Asn Gggg Gly 320 act	Thr ccc pro caa Gln aaa Lys 305 aaa Lys	cag Gln cac His 290 aca Thr gct Ala	CCT CCT CCT CCT CCT CCT	Gly 260 260 27 260 27 28 27 28 28 28 28 28 28 28 28 28 28 28 28 28	gac Asp atg Met ctg Leu ggt Gly gat Asp 325 aca	gta yal tct Ser aca Thr 310 tat Tyr	Leu act Thr ggg Gly 295 tac Tyr atg Met	tgg Trp 280 CCC Pro CCC Arg	Leu 265 g gtg val cacco Asm Cys tat Tyr	aca Thr aga Arg Ctg Glu gaa Glu Val 330 acc	gtc Val ttc Phe gct Ala 315 tac Tyr	gat gat Asp atc Ile 300 tca Ser gat Asp	915 963 1011
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As 112 114 aaa 115 As 116 118 cc	Gln c atc a Ile 270 t gaa p Glu 5 t aac n Asn c ata n Ile	Gly 255 255 256 257 258 258 258 258 258 258 258 258 258 258	tta Leu Jaagy Lys Cct Pro Laac Asn Gly 320 Lact Thr	Thr ccc pro caa Gln aaa Lys 305 aaa Lys	cag Gln cac His 290 aca Thr gct Ala	CCT CCT CCT CCT CCT CCT	Gly 260 260 27 260 27 28 27 28 28 28 28 28 28 28 28 28 28 28 28 28	gac Asp atg Met ctg Leu ggt Gly gat Asp 325 aca Thr	gta yal tct Ser aca Thr 310 tat Tyr	Leu act Thr ggg Gly 295 tac Tyr atg Met	tgg Trp 280 CCC Pro CCC Arg	Leu 265 g gtg val cacco Asm Cys tat Tyr	aca Thr aga Arg Leu gaa Glu gta Val 330 acc	gtc Val ttc Phe gct Ala 315 tac Tyr	gat gat Asp atc Ile 300 tca Ser gat Asp	915 963 1011
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As 112 114 aa 115 As 116 118 cc 119 Pro 120	Gln c atc a Ile 270 t gaa p Glu 5 t aac n Asn c ata n Ile c ccc o Pro	Gly 255 259 251 251 252 253 254 255 255 255 255 255 255 255 255 255	tta Leu Jaag Lys Cct Pro Asn Gly 320 act Thr	Thr ccc pro caa Gln aaa Lys 305 aaa Lys atc Ile	cag Gln cac His 290 aca Thr gct Ala	cet Pro 275 gcc Ala gat Asp cac His	Gly 260 260 275 275 275 275 275 275 275 275 275 275	gac Asp atg Met ctg Leu ggt Gly gat Asp 325 aca Thr	gta yal tct Ser aca Thr 310 tat Tyr	act Thr ggg Gly 295 tac Tyr atg Met	tgg Trp 280 CCC Pro CArg Leu acc	Leu 265 g gtg val caac Asn Cys tat Tyr 345	aca Thr aga Arg Ctg Cqu Gaa Glu Gaa Val 330 acc Thr	gto Val tto Phe gct Ala 315 tao Tyr acc	gat gat Asp atc Ile 300 tca Ser gat Asp	915 963 1011
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As 112 114 aaa 115 As 116 118 cc 119 pro 120 122 ac	Gln c atc a Ile 270 t gaa p Glu 5 t aac n Asn c ata n Ile c ccc p Pro	Gly 255 259 259 250 250 250 250 250 250 250 250 250 250	tta Leu Jaag Lys Cct Pro Laac Asn Gly 320 Loct Thr	Thr ccc Pro caa Gln aaa Lys 305 aaaa Lys atc Ile	cag Gln cac His 290 aca Thr gct Ala cct	Glu cct Pro 275 gcc Ala gat Asp cac His	Gly 260 260 270 280 280 280 280 280 280 280 280 280 28	gac Asp atg Met ctg Leu ggt Gly gat Asp 325 aca Thr	gta yal tct Ser aca Thr 310 tat Tyr aca Thr	Leu act Thr ggg Gly 295 tac Tyr atg Met acc	tgg Trp 280 ccc Pro cgc Arg	Leu 265 g gtg val aac Asn Cys Tat Tyr 345 tcc	aca Thr aga Arg ctg Ctg Glu gaa Glu gta Val 330 acc Thr	gto Val tto Phe gct Ala 315 tac Tyr acc	gat gat Asp atc Ile 300 tca Ser gat Asp	867 915 963 1011 1059
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As 112 114 aa 115 As 116 118 cc 119 Pr 120 122 ac 123 Th	Gln c atc 270 t gaa p Glu 5 t aac n Asn c ata n Ile c ccc c acc r Thr	Gly 255 259 259 26 Gly 26 Gly 27 At a to a	tta Leu Jaag Lys Cct Pro Laac Asn Gly 320 Loct Thr	Thr ccc Pro caa Gln aaa Lys 305 aaaa Lys atc Ile	cag Gln cac His 290 aca Thr gct Ala cct	CCT	Gly 260 260 270 280 281 281 281 281 281 281 281 281 281 281	gac Asp atg Met ctg Leu ggt Gly gat Asp 325 aca Thr	gta yal tct Ser aca Thr 310 tat Tyr aca Thr	Leu act Thr ggg Gly 295 tac Tyr atg Met acc	tgg Trp 280 ccc Pro cgc Arg ctg Leu acc	Leu 265 g gtg val aaco Asn Cys tat Tyr 345 tcc Ser	aca Thr aga Arg ctg Ctg Glu gaa Glu gta Val 330 acc Thr	gto Val tto Phe gct Ala 315 tac Tyr acc	gat gat Asp atc Ile 300 tca Ser gat Asp	867 915 963 1011 1059
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As 112 114 aa 115 As 116 118 cc 119 Pr 120 122 ac 123 Th 124	Gln c atc 270 t gaa p Glu 5 t aac n Asn c ata n Ile c ccc c acc r Thr 350	Gly 255 259 259 26 Gly 26 Gly 27 At a top 27 At a top 28 At a top 37 At a top 37 At a top 37 At a top 38 At a top	tta Leu Jaag Lys Cct Pro Asn Gly 320 act Thr	Thr ccc pro caa Gln aaa Lys 305 aaa Lys atc Ile acc	cag Gln cac His 290 aca Thr gct Ala cct Pro	Glu cct Pro 275 gcc Ala gat Asr cac His cct Pro ctt Leu 355	Gly 260 260 275 275 275 275 275 275 275 275 275 275	gac Asp atg Met ctg Leu ggt Gly gat Asp 325 aca Thr	gta yal tct Ser aca Thr 310 tat Tyr aca Thr	act Thr ggg Gly 295 tac Tyr atg Met acc Thr	tgg Trp 280 ccc Pro cgc Arg ctg Leu acc Thr gat Asp	Leu 265 g gtg val aac Asn Cys tat Tyr 345 tcc Ser	aca Thr aga Arg ctg Leu gaa Glu gta Val 330 acc Thr	gto Val tto Phe gct Ala 315 tac Tyr acc Thr	gat gat Asp atc Ile 300 tca Ser gat Asp acc Thr	867 915 963 1011 1059 1107
99 Leu 100 102 gc 103 Al 104 106 ga 107 As 108 28 110 aa 111 As 112 114 aa 115 As 116 118 cc 119 Pr 120 122 ac 123 Th	Gln c atc a Ile 270 t gaa p Glu 5 t aac n Asn c ata n Ile c ccc c acc r Thr 350 a gaa	Gly 255 259 251 251 252 253 254 255 255 255 255 255 255 255 255 255	tta Leu Jaag Lys Cct Pro Asn Ggg Gly 320 Athrice Thr	Thr ccc pro caa Gln aaa Lys 305 aaa Lys atc Ile acc Thr	cag Gln cac His 290 aca Thr gct Ala cct Pro atc Ile	Glu cct Pro 275 gcc Ala gat Asr cac His cct Pro ctt Leu 355 gca	Gly 260 260 270 280 280 280 280 280 280 280 280 280 28	gac Asp atg Met ctg Leu ggt Gly gat Asp 325 aca Thr atc Ile	gta yal tct Ser aca Thr 310 tat Tyr aca Thr atc Ile	Leu act Thr ggg Gly 295 tac Tyr atg Met acc Thr aca Thr	tgg Trp 280 ccc Pro Arg ctg Leu acc Thr Asp 360 gtg	Leu 265 g gtg val aac Asn Cys tat Tyr 345 tcc Ser	aca Thr aga Arg ctg Leu gaa Glu gta Yal 330 acc Thr cga Arg	Cys gtc Val ttc Phe gct Ala 315 tac Tyr acc Thr gca Ala ggc	gat gat Asp atc Ile 300 tca Ser gat Asp acc Thr	867 915 963 1011 1059





Input Set : A:\SEQUENCE LISTING.txt Output Set: N:\CRF3\05072002\1778187B.raw

	365				370					375					380	
	gtg gcg															1203
131	Val Ala	Val	Val	Val	Phe	Ala	Met	Leu	_	Leu	Leu	Ile	Ile		Gly	
132				385					390					395		
	cgc tat															1251
135	Arg Tyr	Phe	Ala	Arg	His	Lys	Gly	Thr	Tyr	Phe	Thr	His	Glu	Ala	Lys	
136			400					405					410			
138	gga gcc	gat	gac	gca	gca	gac	gca	gac	aca	gct	ata	atc	aat	gca	gaa	1299
139	Gly Ala	Asp	Asp	Ala	Ala	Asp	Ala	Asp	Thr	Ala	Ile	Ile	Asn	Ala	Glu	
140	-	415	_			-	420	-				425				
142	gga gga	caq	aac	aac	tcc	qaa	qaa	aag	aaa	gag	tac	ttc	atc			1341
	Gly Gly															
144	430			•		435		-	•		440					
	tagatca	gee 1	tttti	tatti	tc aa	atga	atai	t cca	aacto	acc	cta	ttta	gat	gataa	aagaga	1401
	cagtgat	-		_						-			-			1461
	gagactg			-		-	_	_	_		_	_				1521
	aaaaaag				_	_							-			1581
	atacatg		_		cc u			o uu	ou c c	ougo	C C C C	1 C C U	cuu		auuu co	1598
	<210> S															1000
	<211> L															
_		-														
	<pre><212> TYPE: PRT </pre> <pre><213> ORGANISM: homo sapiens</pre>															
	<213> ORGANISM: HOMO Sapiens <400> SEQUENCE: 2															
	Met Ala				T.eu	Pro	Ser	Glv	Ser	Gln	Cvs	Δla	Δla	Δla	Ala	
165		DCI	, 41	5	БСС	110	DCI	011	10	0111	010			15		
	Ala Ala	Ala	Ala	-	Pro	Glv	Len	Arσ		Arσ	Len	Len	Leu		Leu	
168			20	110		011	200	25	200	*** 9			30		200	
	Phe Ser	Ala	_	Ala	Len	Tle	Pro		Glv	Asp	Glv	Gln		Len	Phe	
171		35					40		0-1		01	45				
	Thr Lys		Val	Thr	Val	Tle		Glv	Glu	Val	Αla		Tle	Ser	Cvs	
174	50		,			55					60				010	
	Gln Val	Asn	Lvs	Ser	Asp		Ser	Va 1	Tle	Gln		Leu	Asn	Pro	Asn	
177			-1-		70					75					80	
	Arg Gln	Thr	Tle	Tvr		Arα	Asp	Phe	Ara	. –	Len	Lvs	Asp	Ser		
180	01			85		9			90					95		
	Phe Gln	Leu	Len		Phe	Ser	Ser	Ser		Leu	Lvs	Va1	Ser		Thr	
183			100					105					110			
	Asn Val	Ser		Ser	Asp	Glu	Glv		Tvr	Phe	Cvs	Gln		Tvr	Thr	
186		115					120	5	-1-		010	125		-1-		4
	Asp Pro		Gln	Glu	Ser	Tvr		Thr	Tle	Thr	Va l		Va l	Pro	Pro	-
189	130		— — — —			135					140					
	Arg Asn	Len	Met	Ιle	Asp		G] n	Lvs	Asp	Thr		Val	Glu	G] v	Glu	
	145				150			_10		155				1	160	
	Glu Ile	Glu	Val	Asn		Thr	Ala	Met	Ala		Lvs	Pro	Ala	Thr		
195	110			165	-1-				170		-15			175		
	Ile Arg	Tro	Phe		Glv	Asn	Thr	Glu		Lvs	Glv	Lvs	Ser		Val	
198		E	180	-1-	1			185		-1-	1	-4-	190		-	
	Glu Glu	Trp		Asp	Met	Tyr	Thr		Thr	Ser	Gln	Leu		Leu	Lys	
201		195		- L		- 4 -	200					205			4	
-							-									



DATE: 05/07/2002 TIME: 13:59:49

	Val		Lys	Glu	Asp	Asp	-	Val	Pro	Val	Ile		Gln	Val	Glu	His	
204		210	_	_	_		215		_			220	_		•		
	Pro	Ala	Val	Thr	Gly		Leu	Gln	Thr	Gln		Tyr	Leu	Glu	Val		
	225					230					235					240	
209	Tyr	Lys	Pro	Gln	Val	His	Ile	Gln	Met		Tyr	Pro	Leu	Gln	Gly	Leu	
210					245					250		•			255		
212	Thr	Arg	Glu	Gly	Asp	Ala	Leu	Glu	Leu	Thr	Cys	Glu	Ala	Ile	Gly	Lys	
213				260					265	•	•			270			
215	Pro	Gln	Pro	Val	Met	Val	Thr	Trp	Val	Arg	Val	Asp	Asp	Glu	Met	Pro	
216			275					280		•		•	285				
	Gln	His		Va 1	Len	Ser	Glv		Asn	Leu	Phe	Ile	Asn	Asn	Leu	Asn	
219		290		,		001	295					300					
	Lys		λcn	N cn	Clu	Пhr		λνα	Cvc	Clu	λla		Aen	Tla	Va 1	Glv	
	_	1111	ASP	ASII	СТУ		1 A T	AIG	Cys	GIU		SET	NSII	TTE	Vai	320	
	305		•	_	_	310		_	_		315	_	_		ml		
	Lys	Ala	His	ser		Tyr	Met	Leu	Tyr		Tyr	Asp	Pro	Pro		Tnr	
225					325					330					335		
227	Ile	Pro	Pro	Pro	Thr	Thr	Thr	Thr	Thr	Thr	Thr	Thr	\mathtt{Thr}	Thr	Thr	Thr	
228				340					345					350			
230	Thr	Ile	Leu	Thr	Ile	Ile	Thr	Asp	Ser	Arg	Ala	Gly	Glu	Glu	Gly	Ser	
231			355					360		•			365				
	Ile	Ara	Ala	Va 1	Asp	His	Ala		Tle	Glv	Glv	Val	Val	Ala	Val	Val	
234		370					375	,		0-1	U -1	380					
	Val		λla	Mot	LOU	Cvc		Lon	Tlo	тіо	LOU		λνα	Фил	Dho	λla	
		FILE	АТа	Mec	Leu	390	пец	пеп	116	TTE	395	GIY	ni 9	1 7 1	riic	400	
	385	** * .		a 1	ml		5 1	m1	TT -	a1		T	G3	71-	3		
	Arg	HIS	ьys	GIY		Tyr	Pne	Thr	HIS		Ата	ьys	GIY	Ата		ASP	
240					405					410	_	_		_	415		
	Ala	Ala	Asp		Asp	Thr	Ala	Ile	Ile	Asn	Ala	Glu	Gly		Gln	Asn	
243				420					425					430			
245	Asn	Ser	Glu	Glu	Lys	Lys	Glu	Tyr	Phe	Ile							
246			435					440									
248	<210)> SE	EO II	ONO:	: 3												
	<211																
	<212																
	<213				muc	muc	1										
	<220				mus	muse	Julus	•									
					ana												
	<221		-														
	<222																
	<223					FION:	:										
	<400		-														
259	g go	g go	eg co	ct co	ca g	gg ct	c c	gg ct	co og	gg ct	tc ct	tg ct	ig tt	g ct	cc ct	t tcg	49
260	Al	a Al	la Pi	ro Pi	co G	Ly Le	eu Ai	rg Le	eu Ai	rg Le	eu Le	eu Le	eu Le	eu Le	eu Le	eu Ser	
261	1				5					10)				15	5	
	gcc	qcq	qca	cta	atc	ccc	aca	gat	qat	qqa	caq	aat	ctq	ttt	act	aaa	97
	Ala																
265				20				1	25	1				30		-2	
	gac	ata	202		a++	αaa	aa a	us s		uca	200	ato	ado		can	atc	145
	Asp																747
		۷dI		Vdl	тте	GIU	GTÀ		val	HId	T11T.	тте		Cys	GIII	val	
269			35			4		40		_4 -	_4-		45				102
2/1	aat	aag	agt	gac	gac	tca	gtg	atc	cag	CTC	ctg	aac	CCC	aac	agg	cag	193





RAW SEQUENCE LISTING DATE: 05/07/2002 PATENT APPLICATION: US/09/778,187B TIME: 13:59:49

272 273	Asn	Lys 50	Ser	Asp	Asp	Ser	Val 55	Ile	Gln	Leu	Leu	Asn 60	Pro	Asn	Arg	Gln	
275	acc	att	tac	ttc	аσσ	gac	ttc	agg	cct	t.t.a	ааσ	σac	age	аσσ	ttt	cag	241
								Arg									
		TIE	TAT	Pile	ALG		PHE	AIG	PIO	neu	-	кэр	261	ALY	riie		
277						70					75					80	
								gaa									289
280	Leu	Leu	Asn	Phe	Ser	Ser	Ser	Glu	Leu	Lys	Val	Ser	Leu	Thr	Asn	Val	
281					85					90					95		•
	tca	atc	tca	σat	σаа	σσσ	aga	tac	ttc	tac	caq	ctc	tac	acq	gac	CCC	337
								Tyr									
	361	116	Ser	-	GIU	GLY	nr 9	1 Y 1.		Cys	GIII	DCu	111	110	пор	110	
285				100					105								305
		_	-	_				atc		-	_	-					385
288	Pro	Gln	Glu	Ser	Tyr	Thr	Thr	Ile	Thr	Val	Leu	Val	Pro	Pro	Arg	Asn	
289			115					120					125				
291	ttq	atq	atc	gat	atc	cag	aaa	gac	acq	gca	gtt	gaa	ggg	gag	gag	att	433
								Asp									
293		130					135					140	-				
	~ 22		220	+ ~+	3.0±	~~~		gcc	200	224	002		200	200	atc	agg	481
																	401
		vai	ASII	Cys	Thr		мес	Ala	Ser	гуѕ		Ald	1111	1111	iie		•
	145					150					155					160	
						_	_	ctc					-	-			529
300	Trp	Phe	Lys	Gly	Asn	Lys	Glu	Leu	Lys	Gly	Lys	Ser	Glu	Val	Glu	Glu	
301					165					170					175		
303	taa	tca	gac	atq	tac	act	ata	acc	agt	caq	ctq	atq	ctq	aaq	qtq	cac	577
								Thr									
305		001	p	180	- 1 -		,		185	0				190			
	226	~~~	~ ~ ~		~~~	a+ a	000	~+ ~		+ ~ ~	020	a+a	~~~		aat	aca	625
								gtg									023
	ьys	GIU	-	Asp	GLY	vaı	Pro	Val	тте	Cys	GIN	vaı		HIS	Pro	Ala	
309			195					200					205				
								cag									673
312	Val	Thr	Gly	Asn	Leu	Gln	${ t Thr}$	Gln	Arg	Tyr	Leu	Glu	Val	Gln	Tyr	Lys	
313		210					215					220					
315	cca	caa	ata	cat	atc	caq	atg	act	tac	cct	ctq	caa	qqc	cta	acc	cqq	721
	_					_	_	Thr			_						
	225					230			-1-		235		- -1			240	
		~~~	~ a +	~~~			++-	200	+ ~+	~~~		2+0	~~~	224	000		769
								acg									703
	GIu	GTĀ	Asp	Ата		GIU	Leu	Thr	Cys		АТА	тте	GIY	ьys		GIN	
321					245					250					255		
323	cct	gtg	atg	gta	act	tgg	gtg	aga	gtc	gat	gat	gaa	atg	cct	caa	cat	817
324	Pro	Val	Met	Val	Thr	Trp	Val	Arg	Val	Asp	Asp	Glu	Met	Pro	Gln	His	
325				260					265					270			
327	acc	gt.a	cta	tct	aaa	cca	aac	ctg	ttc	atc	aat	aac	cta	aac	aaa	aca	865
								Leu									
329		7 44 44	275	JC1	<u>1</u>	110		280					285		-10		
					<b>.</b>					<b>.</b>		n+-		~~-		~a+	012
								gag									913
	Asp		Gly	Thr	Tyr	Arg		Glu	Ala	Ser	Asn		val	GTA	гĀЗ	Ala	
333		290					295					300					
								gta									961
336	His	Ser	Asp	Tyr	Met	Leu	Tyr	Val	Tyr	Asp	Pro	Pro	Thr	Thr	Ile	Pro	
			-	-			-		-	•							





VERIFICATION SUMMARY

PATENT APPLICATION: US/09/778,187B

DATE: 05/07/2002 TIME: 13:59:50